

National Aeronautics and Space Administration Langley Research Center Office of Strategic Communications and Education

A COOPERATIVE AGREEMENT NOTICE (CAN)

AEROSPACE EDUCATION PROJECT (AESP)

Announcement Number- NNL06ZB1001C

Release Date: January 23, 2007

Proposals Due: March 30, 2007 by 4:30 p.m. (EST)

Anticipated Award date: On or before June 30, 2007

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Executive Summary

This NASA Cooperative Agreement Notice (CAN) is an announcement issued by the NASA Langley Research Center requesting proposals for the Aerospace Education Services Project (AESP). Office of Strategic Communication and Education provides the technical coordination of this effort.

The Aerospace Education Services Project (AESP) governed by NASA's Elementary and Secondary Education Program Plan, is the longest running project to influence education in NASA's education history. As required by NASA Elementary and Secondary Program, AESP's uniqueness comes from the project design that allows NASA to fund professional educators to influence teachers and students face-to-face and through educational technology applications. Through AESP NASA funds and collaborates with education professional developers to provide educators and students with tools, experiences, and opportunities to further their education and participation in unique NASA learning experiences that enhance their knowledge of science, technology, engineering, and mathematics (STEM). Additional information regarding NASA's educational programs may be found at: http://education.nasa.gov/home/index.html

The Aerospace Education Services Project (AESP) is a comprehensive education project designed to fund the recipient's educators to reach out to the formal and informal education community in all fifty states and the United States territories. AESP results in customized professional development programs for educators that highlight the alignment to national, state, and local standards enabling teachers to receive high quality, sustained and job-embedded training in STEM areas. AESP shares NASA's new and evolving instructional technologies and the motivating outcomes of NASA's research, exploration, and discovery with the public and education communities nationwide. AESP motivates students, supports STEM teachers, and encourages students into the workforce pipeline through their student projects, classroom visits, and inquiry-based activities. The project supports family mathematics/science events and other informal education community events while working across America to involve the public directly. Educator awareness increases through the recipient's nationwide network including institutions of higher education, state departments of education, school districts, schools, museums, science centers, and community organizations.

The goals of AESP are to:

- Focus and coordinate state-based NASA activities in all fifty states and territories,
- Understand and support the education initiatives in all fifty states and territories,
- Provide customized professional development for in-service educators,
- Support existing alliances and work to establish new alliances within states,
- Support linkages among Field Center programs and education customers,
- Support the NASA Office of Education Elementary and Secondary Program,
- Support pre-service education, and
- Support informal education.

A funding level of approximately \$4.3M has been established for the initial year of the AESP program. NASA anticipates funding years 2-5, at approximately \$5.8M per year contingent on the availability of funds, progress and continued relevance to the NASA mission. The Government's obligation to make award(s) is contingent upon the availability of appropriated funds from which payment can be made and the receipt of proposals that NASA determines are acceptable for award under this announcement.

Participation in this program is open to educational institutions only because its purpose is to stimulate an educational institution's program of professional educator and education development to accomplish the NASA's AESP goals. Historically Black Colleges and Universities (HBCU's), Tribal Colleges, and other

minority educational institutions (OMI) are particularly encouraged to apply. Proposals from entities outside the United States will not be considered. As defined in the NASA Grant and Cooperative Agreement Handbook, recipients of NASA cooperative agreements may not be paid a profit. The provisions of Part 1260 of the Grant Handbook apply to educational institutions.

NASA plans to award one (1) cooperative agreement as a result of this solicitation. The agreement is planned to be awarded on or about July 1, 2007.

Paper and electronic submission of proposals must be received at the exact location designated within this CAN by **4:30 PM Eastern Standard Time March 30, 2007**. Proposals received after the announcement deadline will not be considered. In addition to paper submission, please provide a complete electronic copy on CD-ROM. Electronic submission does not take the place of the paper submission. See Section IV, Paragraph B.2 for details regarding time and place of proposal submission.

I. Funding Opportunity Description

A. Introduction

As we begin the second century of flight and approach half a century of space exploration, our Nation maintains its commitment to excellence in science, technology, engineering, and mathematics (STEM) education to ensure that the next generation of explorers and innovators is fully prepared to join our workforce with contributions to national needs. The May 2005 report by the National Academies, *Rising Above the Gathering Storm:*Energizing and Employing America for a Brighter Economic Future, proposes four broad recommendations to enhance the science and technology enterprise so that the United States can successfully compete, prosper, and be secure in the global community of the 21st century: 1) increase America's talent pool by vastly improving K-12 science and mathematics; 2) sustain and strengthen the Nation's traditional commitment to long-term basic research; 3) make the United States the most attractive setting in which to study and perform research; and 4) ensure that the United States is the premiere place in the world to innovate.

NASA is taking a leading role to inspire interest in science, technology, engineering, and mathematics, (STEM) as few other organizations can through its unique mission, workforce, facilities, research, and innovations. The agency is also taking a leading role to make significant impacts in engaging underserved and underrepresented communities in STEM. Furthermore it is taking bold steps at the K-12 grade levels to prepare the next generation of explorers.

The projects and activities in NASA's Elementary and Secondary Education Program are intended to provide opportunities in unique NASA learning experiences for students, teachers, and administrators, and families. NASA strives to ensure that underrepresented and underserved students participate in education programs to encourage more of these students to pursue STEM careers. NASA is also working to develop new digital media methods of making its exciting discoveries and missions available to K-12 students and educators.

The Elementary and Secondary Education projects are intended to serve as major links in the student pipeline used to address the Education Goals from NASA's 2006 Strategic Plan. The NASA Education Strategic Coordination Framework: A Portfolio Approach (http://education.nasa.gov/about/strategy) identifies three outcomes for the Agency's education Goals. The Elementary and Secondary Education program focuses primarily on Outcome 2.

Outcome 2: Attract and retain students in the STEM disciplines – To compete
effectively for the minds, imagination, and career ambition of America's young people.
NASA will focus on engaging and retaining students in STEM education programs to
encourage their pursuit of educational disciplines critical to NASA's future engineering, scientific,
and technical missions.

Among the current elementary and secondary education projects is the Aerospace Education Services Project (AESP). The Aerospace Education Services Project's (AESP) primary focus is as a professional development program that serves the elementary and secondary education community by providing classroom demonstrations, distance learning events, faculty workshops, in-service training for teachers, pre-service training for university students, and identification of appropriate classroom resources. The recipient's educator specialists must have teaching experience and must be well-trained and well-equipped in STEM content. They must also be knowledgeable of national science, mathematics, and technology standards, research-based pedagogies and proficient in the use of educational technology tools. The recipient's professional educators are essential to fulfilling the goals of the AESP project.

This Cooperative Agreement Notice (CAN) focuses on collaboration with the recipient to support NASA education in addressing Outcome 2 and providing professional development opportunities to elementary and secondary audiences under its Aerospace Education Services Project.

B. Background

The Aerospace Education Services Project (AESP) is a comprehensive education program designed to reach out to the formal and informal education community in all fifty states and United States territories. NASA intends for AESP to support all states and territories in collaboration with internal and external stakeholders. The main purpose is to bring NASA's multiple assets to bear on each individual state's initiative in education and their individual systemic improvement efforts.

AESP is implemented by the recipient in collaboration with the NASA Field Centers and JPL. The recipient and the NASA Education offices work closely with the AESP project manager and recipient's regional customer base and stakeholders.

AESP seeks to engage and educate these customers:

- Teachers, in-service and pre-service, will be provided short and long-term customized professional development in STEM areas.
- K-12 students will become involved in a variety of NASA STEM activities through instruction by Aerospace Education Specialists.

State-based improvement efforts, which are imperative for AESP to understand, are guided through curriculum frameworks, which are now in place in most states. NASA has found further support in assessing state needs through partnerships with organizations such as the Council of State Science Supervisors, Council of Chief State School Officers, and National Alliance of State Science and Mathematics Coalitions.

The NASA Education Strategic Coordination Framework: A Portfolio Approach

(http://education.nasa.gov/about/strategy/index.html) provides general guidance for the governance, implementation and continual improvement of the NASA Education Program for the AESP effort. Under this Framework, NASA is committed to achieve the Vision "to advance U.S. scientific, security, and economic interests through a robust space exploration program." In order to carry out the Vision, NASA will need the participation of future generations of scientists and engineers. Toward that end, the agency will continue its tradition of investing in the nation's education programs and supporting the country's educators, who play a key role in preparing, inspiring, exciting, encouraging, and nurturing the young minds of today who will manage and lead the nation's laboratories and research centers of tomorrow.

The expectation for the future is that the AESP will support NASA's policy to use its unique assets to support local, state, regional, and national STEM education efforts through collaboration with internal and external stakeholders.

Over the next five years the recipient will work with NASA to implement AESP to focus its efforts to meet five objectives:

- 1. To provide customized professional development opportunities aligned to their state's standards that educate in-service and pre-service teachers allowing them to gain rigorous and relevant content understanding and how it relates to NASA research and development for teaching in the STEM disciplines.
- 2. To build the Nation's workforce by engaging K-12 students and families in educational opportunities using the NASA mission, the STEM disciplines, and research-based teaching.

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3. To support and nurture state and national partnerships with education agencies, professional organizations, and informal education entities to collaborate STEM and awareness of NASA's mission.

- 4. To provide opportunities for family involvement in the K-12 student learning in STEM areas.
- 5. To ensure continuity and synergy with other NASA-funded efforts that target elementary and secondary audiences to provide compelling experiences and progression of opportunities that increase interest in STEM coursework and careers.

In addition, AESP also targets specific cross-cutting investments within NASA's Education portfolio that enable coordination by AESP with the Informal and Higher Education Projects and dissemination and evaluation of NASA activities in maximizing accomplishments areas that include:

- Professional Development for Informal Educator and Pre-service Educators
- Informal Education Provider Involvement Opportunities
- Dissemination
- Evaluation

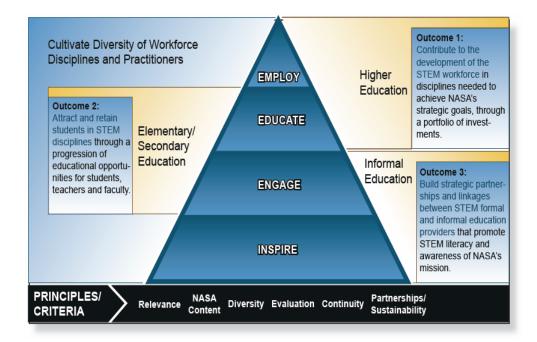


Figure 1 – Agency Education Goals, Outcomes, and Criteria

C. Responsibilities of Recipient:

Support of State-based Programs

- a. Collaborate with NASA to provide support for systemic improvement in STEM, coordinate NASA's objectives into state-based programming, and designing of customized professional development opportunities, research, and staff development.
- b. Ensure all activities comply with state and local guidelines and frameworks in order to contribute to and support state-level systemic improvement efforts.
- c. Collaborate with NASA's to infuse NASA's assets on state-based efforts and provide customized professional development in all fifty states and territories
- d. Understand and support the education initiatives in all fifty states and territories and establish or further develop new educational alliances within states and territories.

e. Collaborate with NASA to influence pre-service education programs at colleges and universities as part of NASA's state-based education strategy

f. Develop policies, procedures, and processes for safety and security of national assets at the disposal of the project.

Professional Development for Aerospace Education Specialists

- a. Collaborate with NASA to influence educator professional development programs for Aerospace Education Specialists in state-based programming design, customized workshop design, education reform, research-based teaching strategies, and technology.
- b. Collaborate with NASA to influence research-based education for AESP Specialists in educational technology utilization; NASA mission; mathematics, science, and engineering content; and current educational pedagogy.

Evaluation

a. Enter all required data into the NASA education data system. (The recipient is encouraged to review the web site found at: https://neeis.gsfc.nasa.gov/JDbGenie/vol1/htdocs/edcats/index_fy2007.html) (Please be advised that certain portions of this web site require a log in and password which you will be provided after award).

Partnerships and Alliances

- a. Collaborate with NASA to develop and conduct outreach activities with professional education associations, national aerospace education associations, industry, other agencies, and organizations within states and US territories.
- b. Collaborate with NASA to develop liaison with groups such as the National Science Teachers Association, National Council of Teachers of Mathematics, International Technology Education Association, and the Association of Supervision and Curriculum Development, National Staff Development Council, and National Association of State Science and Mathematics Coalition.
- c. Collaborate with NASA to feature NASA's assets at national, regional, and state education conferences as part of the ongoing reform activities.

Professional Development for Educators

- a. Collaborate with NASA to design customized professional development opportunities that utilize NASA curriculum support materials, state-of the art educational research and technologies, and pedagogical skills while integrating subject content with the NASA mission as a common theme.
- b. Collaborate with NASA to provide educators with high-quality, inquiry-based experiences including workshops, classroom follow-up and technological means.
- c. Offer university or recertification credit to educators for participation in NASA-supported workshops.

Instructional Opportunities for K-12 Students

- a. Collaborate with NASA to provide opportunities for all learners to explore and experience unique space and aeronautics content and interact with innovative engineers and scientists.
- b. Collaborate with NASA to design instructional activities that model current educational research and development

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ePD (electronic Professional Development)

- a. Recipient and NASA collaborate to develop electronic professional development based on needs of educators.
- b. Engage educators in positive experiences that lead to awareness and that overcome long-held misconceptions, inaccuracies, and habits of practice that weaken instructional effectiveness.
- c. Integrate and coordinate electronic professional development with other initiatives in schools and that are embedded in curriculum, instruction, and assessment practices.
- d. Develop teacher coaching practices involving observing, analyzing and applying feedback for instructional practices.
- e. Promote collaboration among educators associated with similar NASA educational activities, regardless of distance or time differences and among educators in the same school, grade, or subject.

D. LARC Collaborative Responsibilities:

Assessment and Evaluation

- a. Collaborate and plan with recipient on development of annual performance goals and metrics
- b. Conduct an analysis of AESP project/deliverables as provided by the recipient as matched to annual performance goals and Elementary and Secondary Education Program outcomes and objectives.
- c. Analyze budget considerations on an annual basis and make appropriate alterations to the recipient's responsibilities as may be necessary.
- d. Collaborate with the recipient to ensure AESP developed activities and materials meet product review and NASA style guidelines.

NASA Resources and Facilities

- a. Facilitate the engagement of all NASA Centers and JPL in AESP initiatives.
- b. Pursue partnerships to support AESP through talents and resources of government, industry, and private foundations.
- c. Provide NASA-unique strategies, tools, content, and resources that support K-12 education.
- d. Provide office space at each of the Centers and JPL.
- e. Collaborate in the development of the agendas for Professional Development Conferences for AESP staff.
- f. Facilitate cross coordination of Informal and Higher Education outcomes and objectives.
- g. Provide access to the NASA Digital Learning Network for professional development opportunities for students, educators and the public.

Offerors are required to provide a "Statement of Collaboration" in their proposals that details specific recipient and NASA roles and responsibilities relative to each area of collaboration if different from those specified above.

E. Documentation/Deliverables:

1. The award recipient shall provide Monthly Reports, Semi-Annual Project Reviews, and Annual Report/Project Reviews as required by the Cooperative Agreement.

Monthly/semi-annual reports shall include:

Activities performed during the period

Planned activities to be performed the next period

Objective and/or strategy changes

Budget expenditures during the period as compared to the total budget

Demographic make up of program participants during that period Semi-Annual Project Reviews:

Project Manager to have semi-annual reviews with the LaRC Project Officer covering all work performed during the period

2. Annual Performance Plan (APP)

The recipient shall prepare an Annual Performance Plan (APP) 60 days prior to the completion of the first year of performance that provides a detailed plan of activities for the next year. The APP can be modified during the year (no more than quarterly) to permit infusion of new opportunities and innovations into the education plan. The plan and modifications thereto will be approved by LaRC within thirty days following submittal and will constitute the performance objectives for the cooperative agreement as set forth in the recipient's responsibilities.

3. Performance Metrics

The APP described in 2 above shall include proposed performance metrics that will be used by NASA as a measure of accomplishment of objectives during the year and will assist with the determinations for continued funding for future periods. The recipient shall develop metrics that assesses the progress toward attracting and retaining students in the STEM disciplines. The metrics shall include as a minimum the following:

- Education initiatives in all fifty states and territories,
- Professional development for in-service educators,
- Partnerships established with educational institutions,
- Field Center programs and education customers,
- Elementary and Secondary Program initiatives
- Pre-service education workshops and training.
- Informal education outreach activities
- Actual versus planned expenditures

Due to the dynamic nature of the mission, the recipient may recommend changes to the metrics to more effectively measure the recipients operations and goals. NASA will review proposed metrics and changes thereto and provide the recipient with the final version of the metrics to be adhered to during the period by written memorandum from the NASA Project Manager.

4. Annual Progress Report/Project Review:

The recipient shall submit an annual progress report no later than 60 days upon completion of each year of performance under the cooperative agreement. The Annual Report/Project Review will detail opportunities, progress, achievements and results consistent with established metrics. In conjunction with the day-to-day monitoring by the responsible NASA Project Manager and the Grants Officer, the Annual Progress report will be used by LaRC to periodically review the accomplishments to determine if the recipient is meeting the goals and objectives. The Annual Report/Review and other reports required to be submitted under the cooperative agreement will be used in LaRC's assessment of continued funding and the decision to fund future periods.

F. Period of Performance

The period of performance for the award shall be a minimum of one year and a maximum of 5 years from the effective date of the award.

G. NASA Safety Policy:

As with all NASA programs, safety is essential. Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. NASA's safety priority is to protect: (1) the public; (2) astronauts and pilots; (3) the NASA workforce (including organizations working with NASA under NASA award instruments), and (4) high value equipment or property.

II. AWARD INFORMATION

One award is anticipated. An appropriated funding level of approximately \$5.3M has been established for the initial year of the AESP program. A multi-year award for years 2-5 at approximately \$5.8M per year is planned and will be based upon an annual re-evaluation of progress, the availability of funds, and continued relevance to the NASA mission. NASA will incrementally fund the Cooperative Agreement and all funding is subject to the availability of funds.

For this solicitation, the provisions contained in the NASA Grant and Cooperative Agreement Handbook (NPR 5800.1) applies. Proposals from entities outside the United States will not be considered. Recipients of NASA cooperative agreements may not be paid a profit. The provisions contained in Part 1260 of the Handbook apply. Additional information on Cooperative Agreements with NASA may be found at: http://ec.msfc.nasa.gov/hq/library/srba/

NASA reserves the right to make no awards under this cooperative agreement notice (CAN) and, in the absence of program funding or for any other reason to cancel this CAN by having a notice published in the FedBiZOpps and at FedGrants.gov. NASA assumes no liability for canceling the CAN or for anyone's failure to receive actual notice of the cancellation. Cancellation may be followed by issuance and synopsis of a revised CAN.

III. General Eligibility Requirements

A. Eligibility Requirements

Participation in this program is open to educational institutions only. Historically Black Colleges and Universities (HBCU's), Tribal Colleges and other minority educational institutions (OMI's) are particularly encouraged to apply. Proposals from entities outside the United States will not be considered. As defined in the NASA Grant and Cooperative Agreement Handbook recipients of NASA cooperative agreements may not be paid a profit.

B. Program Management/Director

The Principal Investigator/Program Director shall be an employee of the proposing organization upon start of the cooperative agreement.

C. Cost Sharing or Matching

Institution of higher education proposing under a NASA cooperative agreement are not required to cost share; however, NASA can accept cost sharing if it is voluntarily offered. Section B, Provision 1260.123, "Cost sharing or matching" describes the acceptable forms of cost sharing. NASA will consider the nature and extent of any proposed cost sharing into its award determination.

D. Other

Only one response to this announcement will be accepted from eligible institutions.

IV. Proposal and Submission Information

A. Proposal package

This announcement contains all of the proposal material. The NASA Grant and Cooperative Agreement Handbook located on the URL http://ec.msfc.nasa.gov/hq/library/srba/, is a useful reference that relates to many aspects of this announcement.

Solicitation availability: Go to http://prod.nais.nasa.gov/cgi-bin/eps/bizops.cgi?gr=D&pin=23

Click on LaRC, Scroll down to the posting for AESP and attachments.

B. Content and Format of Proposal Submission

1. General Format

The proposal should be formatted according to the order listed in the B.1.7 c-g below and shall not exceed <u>28</u> pages including forms, endorsement letters, and appendices. The table of contents, budget/cost proposal and Certifications Regarding Lobbying, Debarment, Suspension and other Responsibility Matters are not included in the page limitation. Each proposal shall adhere to the table guidelines for the maximum number of pages for that section.

Proposal Content	Page Limit	Appendix References
Proposal Cover Page		
The Proposal Cover Page must include the following items:		
• Legal name of submitting organization (and campus)		
Congressional District		
Proposal Title and CAN Number Proposal Title and CAN Number Data Halington Number District Control of the Control of the Control of the Canada and		
Data Universal Numbering System (DUNS Number) Tay Identification Number (TIN)		
Tax Identification Number (TIN)Commercial and Government Entity (CAGE) Code		
 Name of Program Manager/Director if different than 	1-2	
Principal Investigator		
Organization (include type, e.g., educational)		
 Department (if applicable) 		
 Names and Telephone Numbers of Principal 		
Investigator and Business personnel who may be		
contacted during evaluation or negotiations;		
Facsimile Telephone Number		
• Email Address		
Mailing Address (inc. city, state and zip) Signature and Title of Programs Manager (Director)		
Signature and Title of Program Manager/Director		

	 Signature and Title of Authorizing Organizational Official (person authorized to bind the organization to the agreement) 		
	Certifications Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters and Drug-Free Workplace Requirements Form: For your convenience, the full text is provided in Appendix C.		Appendix C Not included in page limitation
2.	Executive Summary		
	Proposal Abstract: Provide a brief description (abstract) of the objectives and method of approach.	1-2	
	Include bottom line amounts for each year of the proposed project. (Should match details contained in the General Budget Instructions in Appendix A)		Appendix A
3.	Table of Contents	1-2	Not included in page limitation
	Technical Approach – See Section III, Paragraph B.7.d. below for content	5-9	
	Management Approach and Personnel – see Section III, paragraph B.7.e. below for content	5-9	
	Facilities and Equipment and Special Matters – see Section III, paragraph B.7.f. and B.7.h. below for content	3-4	
7.	Other – Any endorsements, appendices, etc	1-2	
1 5	Proposed Budget : See Section III, paragraph B.7.g below In addition to the budget figures on the proposal cover page, a budget narrative by year for each year for which funding is requested should accompany the proposal. Include explanatory notes for each line item in the budget. For cost narrative, consult the "Budget Guidelines" Appendix A.	Not included in page limitation	Appendix A

2. Submission

The original (1) and six (6) copies of the proposal must be received at the exact location indicated below at NASA Langley Research Center no later than **4:30 p.m. Eastern Standard Time, March 30, 2007.** Proposals received after **4:30 p.m. EST, March 30, 2007** are not eligible for consideration. Proposals sent via commercial delivery, courier service or through the U.S. Postal Service by first class, registered or certified mail shall be addressed to and must be received at the following location:

NASA, Langley Research Center Bid Distribution Office Marked for **NNL06ZB1001C** (**Sharon Harper**) M/S 144 Building 1195B, Room 124 9A Langley Boulevard Hampton, VA 23681

3. Proposal Guidelines

a. Proposal

The proposal cover page shall contain the information set forth in Section IV, paragraph B.1 above. For ease of handling, each copy of the proposal should be bound in a three-ring, loose-leaf notebook.

(1) The following page limitations are established for each portion of the proposal submitted in response to this solicitation.

Proposal Section	Page Limit
See Section IV, paragraph B.1. above	Total of 28 pages
Budget, Certifications, & Table of contents	Not included in page limit

- (2) A page is defined as one side of a sheet, 8 1/2" x 11", with at least one inch margins on all sides, using not smaller than 12 point type. Foldouts count as an equivalent number of 8 1/2" x 11" pages. The metric standard format most closely approximating the described standard 8 1/2" x 11" size may also be used.
- (3) In addition, the Budget section of your proposal is not page limited. However, this section is to be strictly limited to budget information. Information that can be construed as belonging in one of the other sections of the proposal will be so construed and counted against that section's page limitation.
- (4) Pages submitted in excess of the limitations specified herein will not be evaluated by the Government and will be returned to the offeror.

An electronic copy must also be submitted with the hard copy proposals. The electronic copy shall be on a CD ROM. The file or files should be in MS Word (.doc), MS Excel (.xls) (cost and charts only), and/or Adobe Acrobat (.pdf) format.

b. Budget

The proposal shall contain sufficient cost detail and supporting information to facilitate a thorough evaluation and award. The proposal budget information shall be sufficiently detailed to allow the Government to identify cost elements for evaluation purposes. The Government will evaluate costs in terms of their reasonableness and acceptability. Each category should be explained and prepared using Appendix A and in accordance with the instructions thereon.

4. DUNS Number:

All applicants must provide the Dun and Bradstreet (D&B) Data Universal Numbering System (DUNS) number for their organization in the Cover page of the proposal. This requirement applies to renewals of awards as well as to prospective new awards. The Federal Government will use the DUNS number to better identify related

organizations that are receiving funding under grants and cooperative agreements, and to provide consistent name and address data for electronic grant application systems. The DUNS number is a unique nine-character identification number provided by the commercial company Dun & Bradstreet (D&B). Applicants may call D&B at 1-866-705-5711 to register and obtain a DUNS number, or access the D&B website at: http://www.dnb.com/us/. The process to request a DUNS number by telephone takes about 10 minutes, and is free of charge. The process to obtain a DUNS number through the website takes about fourteen days, and is also free of charge. Organizations will use the same DUNS number with every proposal submitted for a Federal grant and cooperative agreement. Note that the DUNS number is site-specific.

5. CAGE Number:

NASA also requires the applicant's organization be registered in the Central Contractor Registration (CCR) database and obtain a Commercial and Government Entity (CAGE) code prior to submitting a proposal. Provide this information on the Cover page of the proposal. The purpose of this requirement is to help centralize information about grant recipients and provide a central location for grant recipients to change organizational information. Information for registering in the CCR and online documents can be found at: http://www.ccr.gov/. Before registering, applicants and recipients should review the Central Contractor Registration Handbook, which is also located at http://www.ccr.gov/. The process for obtaining a CAGE code is incorporated into the CCR registration.

6. Taxpayer Identification Number (TIN):

Every U.S. organization (or Unaffiliated Individual) that submits a proposal to a U.S. agency must provide their permanently-assigned TIN in compliance with 31 U.S. Code 7702(c)(1) on the Cover page of the proposal.

7. Instructions for Responding to this Cooperative Agreement Notice (CAN)

a. General.

- (1) Responses to this CAN will be used only for evaluation purposes.
- (2) A solicited CAN that results in a NASA award becomes part of the record of that transaction and may be available to the public on specific request; however, information or material that NASA determines to be confidential proprietary information of the awardee pursuant to Freedom of Information Act procedures and exemptions will be held in confidence to the extent permitted by law.
- (3) Any resultant cooperative agreement will be awarded and administered in accordance with the NASA Grant and Cooperative Agreement Handbook (NPR 5800.1).
- (5) NASA does not have mandatory forms or formats for responses to CAN's; however, it is requested that offers conform to the guidelines in these instructions. NASA may accept offers without discussion; hence, proposals should initially be as complete as possible and be submitted with the offeror's most favorable terms.
- (6) To be considered for award, the offer must contain sufficient technical and cost information to permit a meaningful evaluation; be signed by an official authorized to legally bind the submitting organization; not merely offer to perform standard services or to just provide computer facilities or services.

b. Restriction on Use and Disclosure of Proposal Information.

Information contained in the offer is used for evaluation purposes only. Offerors should, in order to maximize protection of trade secrets or other information that is confidential or privileged, place the following notice on the title page of the proposal and specify the information subject to the notice by inserting an appropriate identification in the notice. In any event, information contained in proposals will be protected to the extent permitted by law, but NASA assumes no liability for use and disclosure of information not made subject to the notice.

Notice Restriction on Use and Disclosure of Proposal Information

The information (data) contained in [insert page numbers or other identification] of this proposal constitutes a trade secret and/or information that is commercial or financial and confidential or privileged. It is furnished to the Government in confidence with the understanding that it will not, without permission of the offeror, be used or disclosed other than for evaluation purposes; provided, however, that in the event a contract (or other agreement) is awarded on the basis of this proposal the Government shall have the right to use and disclose this information (data) to the extent provided in the contract (or other agreement). This restriction does not limit the Government's right to use or disclose this information (data) if obtained from another source without restriction.

c. Executive Summary.

Include a concise (1-2 page) description of the project and method of approach and bottom line amounts for each year of the proposed project.

d. Technical Approach.

- (1) The main body of the offer shall be an outline of the statement of the work to be undertaken and should include objectives and expected significant outcomes; relation to the present state of knowledge; and related similar completed or work-in progress elsewhere. The statement should outline the plan of work, including the broad definition of the work to be undertaken and a description of methods and procedures to be used to accomplish the objectives. The project description should address the evaluation factors in these instructions and any specific factors in the CAN. Any substantial collaboration with individuals not referred to in the budget or use of consultants should be described. Subcontracting significant portions of this effort is discouraged.
- (2) The proposal should cover the complete project to the extent that it can be reasonably anticipated. Principal emphasis should be on the first year of work, and the description should distinguish clearly between the first year's work and work planned for subsequent years.
- (3) A discussion of a start-up plan detailing the approach to assuming full program responsibilities by June 30, 2007 (the anticipated award date of the Agreement). Discuss the extent of involvement of NASA during start-up period.
- (4) Offerors are required to provide a "Statement of Collaboration" in their proposals that details specific recipient and NASA roles and responsibilities relative to each area of collaboration.

e. Management Approach and Personnel.

- (1) Plans for distribution of responsibilities and arrangements for ensuring a coordinated effort should be described. Include an organizational chart for this program identifying key positions. Discuss the responsibilities and authorities of each key position and describe span of control, degree of autonomy and lines of communication. All interfaces with NASA program personnel must be delineated.
- (2) The project manager/director is responsible for supervision of the work and participates in the conduct of the work. Vitae for the project manager and any exceptional qualifications should be included. Omit social security number and other personal items which do not merit consideration in evaluation of the proposal. Give similar biographical information on other key personnel who will be directly associated with the project. Give the names and titles of any other personnel associated substantially with the project in an advisory capacity. Universities should list the approximate number of students or other assistants, together with information as to their level of academic attainment. Any special industry-university cooperative arrangements should be described.

f. Facilities and Equipment.

(1) Describe available facilities and major items of equipment especially adapted or suited to the proposed project, and any additional major equipment that will be required. Provide a detailed list of all resources potentially available to enhance meeting the objectives of the AESP. This would include existing programs, equipment, services and/or facilities that could be leveraged. Indicate the commitment/availability of these resources. Identify any Government-owned facilities, or special equipment that is required for use. (The GFE available for the contractors use is detailed at http://dml.larc.nasa.gov/aesp/index.htm)

(2) Before requesting a major item of capital equipment, the offeror should determine if sharing or loan of equipment already within the organization is a feasible alternative. Where such arrangements cannot be made, the proposal should so state. The need for items should be explained.

g. Proposed Costs.

- (1) Offers should contain cost separately from the contents of paragraphs c-f above and follow the guidance set forth in Appendix A. Do not use separate "confidential" salary pages. As applicable, include separate budgetary estimates for salaries and wages; fringe benefits; equipment; expendable materials and supplies; services; domestic and foreign travel; IT expenses; publication or page charges; consultants; subcontracts; other miscellaneous identifiable direct costs; and indirect costs. List salaries and wages in appropriate organizational categories (e.g., principal investigator, other professionals, graduate students, research assistants, and other non-professional personnel). Estimate all staffing data in terms of staff-months or fractions of full-time.
- (2) Explanatory notes should accompany the cost offer to provide identification and estimated cost of major capital equipment items to be acquired; purpose and estimated number and lengths of trips planned; basis for indirect cost computation (including date of most recent audit and cognizant agency); and clarification of other items in the cost offer that are not self-evident. List estimated expenses as yearly requirements. Provide detailed proposals for any subcontract/consultant costs.
 - (3) Allowable costs are governed by OMB Circulars A-21 for educational institutions.
- (4) NASA funding may not be used for foreign efforts at any level, whether as a collaborator or a subcontract.
 - **h. Security.** Offers should not contain classified material.

i. Special Matters.

- (1) Identify and discuss risk factors and issues throughout the offer where they are relevant, and your approach to managing these risks.
- (2) Offerors must include a detailed description of previous work experience that relates to the proposed collaboration within the offer. Provide names and contact information of cognizant individuals who may be contacted to verify this information.
- (3) Personal Identity Verification of Recipients: Offerors shall comply with the requirements set forth in GIC 06-02 found at http://ec.msfc.nasa.gov/hq/gic/gic06-02.html for all work planned to be conducted on federal facilities.
- **j.** Late Offers. Offers or offer modifications received after the latest date specified for receipt of proposals will not be considered.
- **k. Withdrawal**. Offers may be withdrawn by the offeror at any time before award. Offerors are requested to notify NASA if the offer is funded by another organization or of other changed circumstances which dictate termination of evaluation.

8. Evaluation Factors.

a. Unless otherwise specified in the CAN, the principal elements (of approximately equal weight) considered in evaluating an offer are its relevance to NASA's objectives, intrinsic merit, and cost.

- b. Evaluation of an offer's relevance to NASA's objectives includes the consideration of the potential contribution of the effort to NASA's AESP mission as described in this CAN.
- c. Evaluation of its intrinsic merit includes the consideration of the following factors of equal importance:
- (1) Overall technical merit of the offer or unique and innovative methods, approaches, or concepts demonstrated by the offer.
- (2) Offeror's capabilities, related experience, facilities, or unique combinations of these which are integral factors for achieving the offer objectives.
- (3) The qualifications, capabilities, and experience of the proposed principal investigator, team leader, and key personnel critical in achieving the offer objectives.
- d. Evaluation of the cost for this proposed effort will include the realism and reasonableness of the proposed cost in relation to available funds and the work to be performed. Cost realism" means that the costs in the proposal- (1) Are realistic for the work to be performed; (2) Reflect a clear understanding of the requirements; and (3) Are consistent with the various elements of the technical proposal.

9. Evaluation Techniques.

Selection decisions will be made following peer review of the offers.

Each offer will be evaluated by at least two peer reviewers. NASA will assign the following ratings for use by the reviewers in evaluating each offer:

The reviewers will use the following adjectival ratings to rank individual offers:

Adjectival Rating	Definition
Excellent	A comprehensive and thorough offer of exceptional merit with one or more significant strengths. No deficiency or significant weakness exists.
Very Good	An offer having no deficiency and which demonstrates over-all competence. One or more significant strengths have been found, and strengths outbalance any weaknesses that exist.
Good	An offer having no deficiency and which shows a reasonably sound response. There may be strengths or weaknesses, or both. As a whole, weaknesses not offset by strengths do not significantly detract from the offeror's response.
Fair	An offer having no deficiency and which has one or more weaknesses. Weaknesses outbalance any strengths.

Poor	An offer that has one or more deficiencies or significant weaknesses that demonstrate a lack of overall competence or would require a major offer revision to correct.
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10. Selection for Award.

a. When an offer is not selected for award, the offeror will be notified. NASA will explain generally why the offer was not selected. Offerors desiring additional information may contact the selecting official who will arrange a debriefing.

b. When an offer is selected for award, negotiation and award will be handled by the procurement office at LaRC or the NASA Shared Services Center (NSSC). The offer is used as the basis for negotiation. The Grant Officer may request certain business data and may forward a model award instrument and other information pertinent to negotiation.

V. NASA Contacts

Questions or comments regarding this announcement may be directed to the following:

Sharon. A. Harper
Grant/Contracting Officer
Sharon.A.Harper@nasa.gov
NASA, Langley Research Center
Office of Procurement
Mail Stop 126, 9A Langley Boulevard
Hampton, VA 23681

Phone: 757-864-2474 Fax: 757-864-7709

APPENDIX A Budget Summary



BUDGET SUMMARY

	FROM	TO	(performance period)
Recipient's Costs			

	A	В	С
Direct Labor: Salaries, wages Fringe benefits (if any) Overhead	1	\$.00	\$
Other Direct Costs:	2		
Subcontracts (provide copy of sub proposal with same level of detail as prime) Consultants (provide copy of consultant proposal with same level of detail as prime) Equipment Supplies Travel Other Other Other (explain each element)			
Facilities & Administrative Costs:	3		
Other Applicable Costs:	4		
SUBTOTAL – Estimated Costs:	5		0
Less: Proposed Cost Sharing (if any):	6		
TOTAL ESTIMATED COST:	7	\$	0
APPROVED BUDGET:	\$	\$	\$
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Instructions

- 1. Provide a completed budget summary sheet for year one and separate estimates for each subsequent year.
- 2. Recipient's estimated costs should be entered in Column A. Columns B and C are for NASA use only.
- 3. Provide as attachments detailed computations of estimates in each cost category with narratives required to fully explain proposed costs.

NOTICE: INFORMATION CONTAINED ON THIS FORM IS NOT TO BE RELEASED OUTSIDE OF THE GOVERNMENT WITHOUT THE EXPRESS WRITTEN CONSENT OF THE RECIPIENT.

Budget Summary

SPECIFIC COSTS

- 1. <u>Direct Labor (salaries, wages, fringe benefits and overhead)</u>: Attachments should list number and titles of personnel, amounts of time to be devoted to the agreement, and rates of pay. Specify the fringe benefit rates/amounts for students (including graduate students and Research Associates if proposed) and for other labor with explanations for differences/if any. Identify the Overhead rate and the basis therefore. Provide the name, address and telephone number of the Federal Agency having cognizance. Any variation in the rates must be explained.
- 2. Other Direct Costs: Cite the basis for each element of cost
 - a. Subcontracts: Attachments should describe the work to be subcontracted, estimated amount, recipient (if known), and the reason for subcontracting. Provide a detailed breakout from the subcontractor for any subcontract costs in excess of \$100,000.
 - b. Consultants: Identify consultants to be used, why they are necessary, the time they will spend on the project, and rates of pay. Provide a detailed breakout from the consultant. The rates for the consultant must be verifiable.
 - c. Equipment: List separately. Explain the need for items costing more than \$5,000, unless a lower threshold has been established by your institution for classifying such purchases as equipment. Describe the basis for estimated cost. General purpose equipment is not allowable as a direct cost unless specifically approved by the grant officer. Any equipment purchase requested to be made as a direct charge under this agreement must include the equipment description, how it will be used in the conduct of the work proposed, why it cannot be purchased with indirect funds, and a statement certifying that the equipment will be used exclusively for this effort and not for general business or administrative purposes.
 - d. <u>Supplies</u>: For items below the threshold established for equipment, provide the general categories of needed supplies, the method of acquisition and the estimated cost.
 - e. Travel: Describe the purpose of the proposed travel in relation to the agreement and provide the basis of the estimate, including information on destination, duration, number of travelers and basis for airfare, rental car and any other costs.
 - f. Other: Enter the total of direct costs not covered by 2a through 2e. Attach an itemized list explaining the need for each item and the basis for the estimate.
- 3. <u>Facilities and Administrative (F&A) Costs</u>: Identify F&A cost rate(s) and base(s) as approved by the cognizant Federal agency, including the effective period of the rate. Provide the name, address, and telephone number of the Federal agency official having cognizance. If unapproved rates are used, explain why, and include the computational basis for the F&A expense pool and corresponding allocation base for each rate.
- 4. Other Applicable Costs: Enter total, explaining the need for each item.
- 5. Subtotal-Estimated Costs: Enter the sum of items 1 through 4.
- 6. <u>Less Proposed Cost Sharing (if any)</u>: Enter any amount proposed. If cost sharing is based on specific cost items, identify each item and amount in an attachment. Explain the basis for cost sharing if any in separate sheets.
- 7. Total Estimated Costs: Enter the total after subtracting items 6 from item 5.

APPENDIX B

Standard Grant and Cooperative Agreement (will be tailored to recipient)

See Next Page

NASA

National

NASA Grant and Cooperative

	☐ COOPERATIVE

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EDUCATION GRANTS AND EDUCATION COOPERATIVE AGREEMENTS

Special Conditions

§ 1260.30 Rights in data. (August 2005)

- (a) Fully Funded Efforts.
- (1) "Data" means recorded information, regardless of form, the media on which it may be recorded, or the method of recording, created under the grant or cooperative agreement. The term includes, but is not limited to, data of a scientific or technical nature, and any copyrightable work, including computer software and documentation thereof, in which the recipient asserts copyright, or for which copyright ownership was purchased, under the grant or cooperative agreement.
- (2) The Recipient grants to the Federal Government, a royalty-free, nonexclusive and irrevocable license to use, reproduce, distribute (including distribution by transmission) to the public, perform publicly, prepare derivative works, and display publicly, data in whole or in part and in any manner for Federal purposes and to have or permit others to do so for Federal purposes only. For purposes of this cooperative agreement, "Federal purposes" includes but is not limited to activities which fulfill the goals of the Aerospace Education Services Project (AESP) specified in the Executive Summary of the Cooperative Agreement Notice (CAN), and may include distribution of data through a variety of media, including but not limited to print, television, websites, or any other means the Federal Government deems appropriate
- (3) In order that the Federal Government may exercise its license rights in data, the Federal Government, upon request to the Recipient, shall have the right to review and/or obtain delivery of data resulting from the performance of work under this grant, and authorize others to receive data to use for Federal purposes.
- (b) *Cost Sharing and/or Matching Efforts*. When the Recipient cost shares with the Government on the effort, the following paragraph applies:
- "(1) In the event data first produced by Recipient in carrying out Recipient's responsibilities under an agreement is furnished to NASA, and Recipient considers such data to embody trade secrets or to comprise commercial or financial information which is privileged or confidential, and such data is so identified with a suitable notice or legend, the data will be maintained in confidence and disclosed and used by the Government and its Contractors (under suitable protective conditions) by or on behalf of the Government for Federal purposes only.
 - (c) For Cooperative Agreements the following paragraph applies:
- "(1) As to data first produced by NASA in carrying out NASA's responsibilities under a cooperative agreement and which data would embody trade secrets or would comprise commercial or financial information that is privileged or confidential if it has been obtained from the Recipient, such data will be marked with an appropriate legend and maintained in confidence for 5 years (unless a shorter period has been agreed to between the Government and Recipient) after development of the information, with the express understanding that during the aforesaid period such data may be disclosed and used (under suitable protective conditions) by or on behalf of the Government for Federal Government purposes only, and thereafter for any purpose whatsoever without restriction on disclosure and use. Recipient agrees not to disclose such data to any third party without NASA's written approval until the aforementioned restricted period expires."

§1260.51 Cooperative Agreement Special Condition (October 2000)

(a) This award is a cooperative agreement as it is anticipated there will be substantial NASA
involvement during performance of the effort. NASA and the Recipient mutually agree to the following
statement of anticipated cooperative interactions which may occur during the performance of this effort:

- (b) The terms "Grant" and "Recipient" mean "Cooperative Agreement" and "Recipient of Cooperative Agreement," respectively, whenever the terms appear in provisions and special conditions included in this agreement.
- (c) NASA's ability to participate and perform its collaborative effort under this cooperative agreement is subject to the availability of appropriated funds and nothing in this cooperative agreement commits the United States Congress to appropriate funds therefore.

Note: The negotiated statement of collaboration agreed to by the parties will become a part of this order.

§1260.52 Multiple-Year Grant or Cooperative Agreement (October 2000)

This is a multiple-year Grant or Cooperative Agreement. Contingent on the availability of funds, progress of the project, and continued relevance to NASA programs, NASA anticipates continuing support at approximately the following levels:

Period <u>Amount</u> <u>Anticipated Funding</u>

TBD

§1260.53 Incremental funding (October 2000)

- (a) Only \$___TBD___ of the amount indicated on the face of this award is available for payment and allotted to this award. NASA contemplates making additional allotments of funds during performance of this effort. It is anticipated that these funds will be obligated as appropriated funds become available without any action required by the Recipient. The Recipient will be given written notification by the NASA Grant Officer.
- (b) The recipient agrees to perform work up to the point at which the total amount paid or payable by the Government approximates but does not exceed the total amount actually allotted to this grant or cooperative agreement. NASA is not obligated to reimburse the Recipient for the expenditure of amounts in excess of the total funds allotted by NASA to this grant or cooperative agreement. The Recipient is not authorized to continue performance beyond the amount allotted to this award.

§1260.54 Cost Sharing (October 2000) (only if applicable and proposed)

(a)	NASA and the Recipient will share in providing the rese	ources necessary to perforr	n the agreement.
NASA	funding and non-cash contributions (personnel, equipme	ent, facilities, etc.) and the	dollar value of the
Recipie	ent's cash and/or non-cash contribution will be on a	percent NASA;	percent Recipient
basis.		_	_

(b)	The funding and non-cash contributions by both parties is represented by the following dollar amounts
	Government Share:

Recipient Share:

Total Amount :

(c) Criteria and procedures for the allowability and allocability of cash and non-cash contributions shall be governed by Sec. 1260.123, Cost Sharing or Matching. The applicable Federal cost principles are cited in Sec. 1260.127.

(d) The Recipient's share shall not be charged to the Government under this agreement or under any other contract, grant, or cooperative agreement.

§1260.55 Reports Substitution (October 2000)

Technical Reports may be substituted for the required Performance Reports. The title page of such reports shall clearly indicate that the substitution has been made and will show the period covered by the originally required Performance Report.

§1260.56 Withholding (August 2003)

If a Recipient fails to comply with the project objectives, the terms and conditions of this award, or reporting requirements under this or previous NASA awards, NASA may withhold advance payments under this award including its augmentations, and may also withhold advance payments under future awards to the Recipient, pending correction of the deficiency by the Recipient. Upon determination that the deficiency has been corrected, the cognizant NASA Financial Management Office shall resume advance payments and release of previously withheld amounts after coordination with the Grant Officer.

§1260.60 Public information (October 2000)

Information regarding this grant (including a copy of this award document) may be released by the Recipient without restriction. However, technical information relating to work performed under this grant where there was a NASA contribution should be released by the Recipient only after consultation with the NASA Technical Officer.

§1260.61 Allocation of risk/liability (October 2000)

- (a) With respect to activities undertaken under this agreement, the Recipient agrees not to make any claim against NASA or the U.S. Government with respect to the injury or death of its employees or its contractors and subcontractor employees, or to the loss of its property or that of its Contractors and subcontractors, whether such injury, death, damage or loss arises through negligence or otherwise, except in the case of willful misconduct.
- (b) In addition, the Recipient agrees to indemnify and hold the U.S. Government and its Contractors and subcontractors harmless from any third party claim, judgment, or cost arising from the injury to or death of any person, or for damage to or loss of any property, arising as a result of its possession or use of any U.S. Government property.

§1260.66 Listing of reportable equipment and other property (October 2000)

(a) Title to federally-owned property provided to the Recipient remains vested in the Federal Government, and shall be managed in accordance with Sec. 1260.133. The following items of federally-owned property are being provided to the recipient for use in performance of the work under this grant or cooperative agreement:

- 1. 1994 Chevy Astro Passenger Van.
 - a. License Plate: NA000964 (old plate #: NA-11015)
- 2. 1994 Chevy Astro Passenger Van.
 - a. License Plate: NA000965 (old plate #: NA-11025)
- 3. 1995 Ford Cargo Van.
 - a. License Plate: NA000966 (old plate #: NA-11034)
- 4. 1995 Ford Cargo Van.
 - a. License Plate: NA000967 (old plate #: NA-11008)
- 5. 1995 Ford Cargo Van.
 - a. License Plate: NA000971 (old plate #: NA-11020)
- 6. 1995 Ford Cargo Van.
 - a. License Plate: NA000972 (old plate #: NA-11031)
- (b) The following specific items of equipment acquired by the Recipient have been identified by NASA for transfer of title to the Government when no longer required for performance under this grant or cooperative agreement. This equipment will be managed in accordance with 1260.134, and shall be transferred to NASA or NASA's designee in accordance with the procedures set forth at 1260.134(g):

"Not Applicable"

1. Monthly Progress/Semi-Annual Project Reviews

The recipient shall provide the following monthly/semi-annual reports as noted below:

Monthly/semi-annual reports shall include:

Activities performed during the period

Planned activities to be performed the next period

Objective and/or strategy changes

Budget expenditures during the period as compared to the total budget

Demographic make up of program participants during that period

Semi-Annual Project Reviews:

Project Manager to have semi-annual reviews with the LaRC Project Officer covering all work performed during the period

2. Annual Performance Plan (APP)

The recipient shall prepare an Annual Performance Plan (APP) 60 days prior to the completion of the first year and annually thereafter that provides a detailed plan of educational activities. The APP can be modified during the year (no more than quarterly) to permit infusion of new opportunities and innovations into the education plan. The plan and modifications thereto will be approved by LaRC and will constitute the performance objectives for the cooperative agreement as set forth in the recipient's responsibilities.

3. Performance Metrics

The APP noted above shall include performance metrics will be used as a measure of accomplishment of objectives during the year and will assist with the determinations for continued funding for future periods. The recipients shall develop metrics that assesses the progress toward attracting and retaining students in the STEM disciplines: The metrics should include as a minimum the following:

- Education initiatives in all fifty states and territories,
- Professional development for in-service educators,

• Partnerships established with educational institutions,

- Field Center programs and education customers,
- Elementary and Secondary Program initiatives
- Pre-service education workshops and training.
- Informal education outreach activities
- Actual versus planned expenditures

Due to the dynamic nature of the mission, the recipient may recommend changes to the metrics to more effectively measure the recipients operations and goals.

4. Annual Progress Report/Project Review:

The recipient shall submit an annual report no later than 60 days upon completion of each year of performance under the cooperative agreement. The Annual Progress Report/Project Review will detail opportunities, progress, achievements and results consistent with established metrics. In conjunction with the day-to-day monitoring by the responsible NAA Project Manager and Grants Officer, the Annual Progress report will be used by LaRC to periodically review the accomplishments to determine if the recipient is meeting the goals and objectives. The Annual Progress Report/Review and other reports required to be submitted under the cooperative agreement will be used in LaRC's assessment of continued funding and the decision to fund future periods.

5. Personal Identity Verification (PIV) of Grant/Cooperative Agreement Personnel

- (a) The recipient shall comply with agency personal identity verification procedures identified below that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24, and Federal Information Processing Standards Publication (FIPS PUB) Number 201.
- (b) The recipient shall insert this provision in all subawards when the subawardee is required to have physical access to a federally-controlled facility or access to a Federal information system.

PIV Card Issuance Procedures in accordance with Grant and Cooperative Agreement Handbook § 1260.35 Investigative Requirements (January 2004)

FIPS 201 Appendix A graphically displays the following procedure for the issuance of a PIV credential.

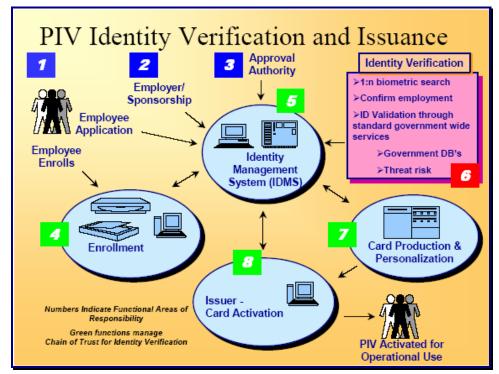


Figure A-1, FIPS 201, Appendix A

The following steps describe the procedures for the NASA Personal Identity Verification Card Issuance (PCI) of a PIV credential:

Step 1:

The grantee or recipient submits a formal letter that provides a list of the names of individuals (applicants) who require access to a federally-controlled facility or access to a Federal information system to the cognizant NASA grant officer. In the case of a foreign national applicant, approval through the NASA Foreign National Management System (NFNMS) must be obtained for the visit or assignment before any processing for a PIV credential can take place. Further, if the foreign national is not under a grant or cooperative agreement where a grant officer has been officially designated, the foreign national will provide the information directly to their visit/assignment host, and the host sponsor will fulfill the duties of the grant officer mentioned herein. In each case, the letter shall provide notification of the grant, cooperative agreement, or foreign national's full name (first, middle and last), social security number (SSN) or NASA Foreign National Management System Visitor Number if the foreign national does not have a SSN, and date of birth. If the applicant has a current satisfactorily completed National Agency Check with Inquiries (NACI) or an equivalent or higher degree of background investigation, the letter shall indicate the type of investigation, the agency completing the investigation, and date the investigation was completed. Also, the letter must specify the risk/sensitivity level associated with the position in which each applicant will be working (NPR 1600.1, §4.5 is germane) Further, the letter shall also acknowledge that applicants may be denied access to NASA information or information systems based on an unsatisfactory background investigation/adjudication.

After reviewing the letter for completeness and concurring with the risk/sensitivity levels, the grant officer/host must forward the letter to the Center Chief of Security (CCS). The CCS shall review the OPM databases (e.g., DCII, PIP, et al.), and take appropriate steps to validate the applicant's investigation status. Requirements for a NACI or other investigation shall be initiated only if necessary.

Applicants who do not currently possess the required level of background investigation shall be directed to the e-QIP web site to complete the necessary background investigation forms online. The CCS shall provide to the grant officer/host information and instructions on how to access the e-QIP for each grantee, recipient or foreign national employee requiring access.

Step 2

Upon acceptance of the letter/background information, the applicant will be advised that in order to complete the investigative process, he or she must appear in-person before the authorized PIV registrar and submit two forms of identity source documents in original form. The identity source documents must come from the list of acceptable documents included in Form I-9, Employment Eligibility Verification, one of which must be a Federal¹ or State issued picture identification. Fingerprints will be taken at this time. The applicant must appear no later than the entry on duty date.

When the applicant appears, the registrar will electronically scan the submitted documents; any document that appears invalid will be rejected by the registrar. The registrar will capture electronically both a facial image and fingerprints of the applicant. The information submitted by the applicant will be used to create or update the applicant identity record in the Identity Management System (IDMS).

Step 3:

Upon the applicant's completion of the investigative document, the CCS reviews the information, and resolves discrepancies with the applicant as necessary. When the applicant has appeared in person and completed fingerprints, the package is electronically submitted to initiate the NACI. The CCS includes a request for feedback on the NAC portion of the NACI at the time the request is submitted.

Step 4

Prior to authorizing physical access of a grantee or recipient to a federally-controlled facility or access to a Federal information system, the CCS will ensure that a National Crime Information Center (NCIC) with an Interstate Identification Index check is/has been performed. In the case of a foreign national, a national check of the Bureau of Immigration and Customs Enforcement (BICE) database will be performed for each applicant. If this process yields negative information, the CCS will immediately notify the grant officer/host of the determination regarding access made by the CCS.

Step 5

Upon receipt of the completed NAC, the CCS will update IDMS from the NAC portion of the NACI and indicate the result of the suitability determination. If an unsatisfactory suitability determination is rendered, the grant officer will advise the grantee or recipient that the applicant is being denied physical access to all federally-controlled facilities and Federal information systems.

Based on a favorable NAC and NCIC/III or BICE check, the CCS will authorize the issuance of a PIV federal credential in the Physical Access Control System (PACS) database. The CCS, based on information provided by the grant officer/host, will determine what physical access the applicant should be granted once the PIV issues the credential.

Step 6:

Using the information provided by the applicant during his or her in-person appearance, the PIV card production facility creates and instantiates the approved PIV card for the applicant with an activation date commensurate with the applicant's start date.

Step 7:

The applicant proceeds to the credential issuance facility to begin processing for receipt of his/her federal credential.

¹ A non-PIV government identification badge, including the NASA Photo Identification Badge, <u>MAY NOT BE USED</u> for the original issuance of a PIV vetted credential

The applicant provides to the credential issuing operator proof of identity with documentation that meets the requirements of FIPS 201 (DHS Employment Eligibility Verification (Form I-9)) documents. These documents **must** be the same documents submitted for registration.

The credential issuing operator will verify that the facial image, and optionally referenced finger print, matches the enrollment data used to produce the card. Upon verification of identity, the operator will locate the employee's record in the PACS database, and modify the record to indicate the PIV card has been issued. The applicant will select a PIN for use with his or her new PIV card. Although root data is inaccessible to the operator, certain fields (hair color, eye color, etc.) may be modified to more accurately record the employee's information.

The applicant proceeds to a kiosk or other workstation to complete activation of the PIV card using the initial PIN entered at card issuance.

ALTERNATIVE FOR APPLICANTS WHO DO NOT HAVE A COMPLETED AND ADJUDICATED NAC AT THE TIME OF ENTRANCE ON DUTY (EOD)

Steps 1 through 4 shall be accomplished for all applicants in accordance with the process described above. If the applicant is unable to appear in person until the time of entry on duty, or does not, for any other reason, have a completed and adjudicated NAC portion of the NACI at the time of entrance on duty, the following interim procedures shall apply.

- 1. If the documents required to submit the NACI have not been completed prior to EOD, the applicant will be instructed to complete all remaining requirements for submission of the investigation request. This includes presentation of I-9 documents and completion of fingerprints, if not already accomplished. If the applicant fails to complete these activities as prescribed in NPR 1600.1 (Chapters 3 & 4), it may be considered as failure to meet the conditions required for physical access to a federally-controlled facility or access to a Federal information system, and result in denial of such access.
- 2. Based on favorable results of the NCIC, the applicant shall be issued a temporary NASA identification card for a period not-to-exceed six months. If at the end of the six month period the NAC results have not been returned, the agency will at that time make a determination as to whether an additional extension will be granted for the temporary identification card.
- 3. Upon return of the completed NAC, the process will continue from Step 5.

6. Security Requirements for Unclassified Information Technology Resources (NASA 1852.204-76) (November 2004)

- (a) The Contractor shall be responsible for Information Technology security for all systems connected to a NASA network or operated by the Contractor for NASA, regardless of location. This clause is applicable to all or any part of the contract that includes information technology resources or services in which the Contractor must have physical or electronic access to NASA's sensitive information contained in unclassified systems that directly support the mission of the Agency. This includes information technology, hardware, software, and the management, operation, maintenance, programming, and system administration of computer systems, networks, and telecommunications systems. Examples of tasks that require security provisions include:
 - (1) Computer control of spacecraft, satellites, or aircraft or their payloads;
- (2) Acquisition, transmission or analysis of data owned by NASA with significant replacement cost should the contractor's copy be corrupted; and
- (3) Access to NASA networks or computers at a level beyond that granted the general public, e.g. bypassing a firewall.
 - (b) The Contractor shall provide, implement, and maintain an IT Security Plan. This plan shall describe the

processes and procedures that will be followed to ensure appropriate security of IT resources that are developed, processed, or used under this contract. The plan shall describe those parts of the contract to which this clause applies. The Contractor's IT Security Plan shall be compliant with Federal laws that include, but are not limited to, the Computer Security Act of 1987 (40 U.S.C. 1441 et seq.) and the Government Information Security Reform Act of 2000. The plan shall meet IT security requirements in accordance with Federal and NASA policies and procedures that include, but are not limited to:

- (1) OMB Circular A-130, Management of Federal Information Resources, Appendix III, Security of Federal Automated Information Resources;
 - (2) NASA Procedures and Guidelines (NPR) 2810.1, Security of Information Technology; and
 - (3) Chapter 3 of NPR 1620.1, NASA Security Procedural Requirements.
- (c) Within <u>30</u> days after award, the contractor shall submit for NASA approval an IT Security Plan. This plan must be consistent with and further detail the approach contained in the offeror's proposal that resulted in the award of this contract and in compliance with the requirements stated in this clause. The plan, as approved by the Contracting Officer, shall be incorporated into the contract as a compliance document.
- (d)(1) Contractor personnel requiring privileged access or limited privileged access to systems operated by the Contractor for NASA or interconnected to a NASA network shall be screened at an appropriate level in accordance with NPR 2810.1, Section 4.5; NPR 1620.1, Chapter 3; and paragraph (d)(2) of this clause. Those Contractor personnel with non-privileged access do not require personnel screening. NASA shall provide screening using standard personnel screening National Agency Check (NAC) forms listed in paragraph (d)(3) of this clause, unless contractor screening in accordance with paragraph (d)(4) is approved. The Contractor shall submit the required forms to the NASA Center Chief of Security (CCS) within fourteen (14) days after contract award or assignment of an individual to a position requiring screening. The forms may be obtained from the CCS. At the option of the government, interim access may be granted pending completion of the NAC.
- (2) Guidance for selecting the appropriate level of screening is based on the risk of adverse impact to NASA missions. NASA defines three levels of risk for which screening is required (IT-1 has the highest level of risk):
- (i) **IT-1** -- Individuals having privileged access or limited privileged access to systems whose misuse can cause very serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of spacecraft, satellites or aircraft.
- (ii) **IT-2** -- Individuals having privileged access or limited privileged access to systems whose misuse can cause serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of payloads on spacecraft, satellites or aircraft; and those that contain the primary copy of "level 1" data whose cost to replace exceeds one million dollars.
- (iii) **IT-3** -- Individuals having privileged access or limited privileged access to systems whose misuse can cause significant adverse impact to NASA missions. These systems include, for example, those that interconnect with a NASA network in a way that exceeds access by the general public, such as bypassing firewalls; and systems operated by the contractor for NASA whose function or data has substantial cost to replace, even if these systems are not interconnected with a NASA network.
 - (3) Screening for individuals shall employ forms appropriate for the level of risk as follows:
- (i) IT-1: Fingerprint Card (FC) 258 and Standard Form (SF) 85P, Questionnaire for Public Trust Positions;
 - (ii) IT-2: FC 258 and SF 85. Questionnaire for Non-Sensitive Positions; and
 - (iii) IT-3: NASA Form 531, Name Check, and FC 258.
- (4) The Contracting Officer may allow the Contractor to conduct its own screening of individuals requiring privileged access or limited privileged access provided the Contractor can demonstrate that the procedures used by the Contractor are equivalent to NASA's personnel screening procedures. As used here, equivalent includes a check for criminal history, as would be conducted by NASA, and completion of a questionnaire covering the same information as would be required by NASA.
- (5) Screening of contractor personnel may be waived by the Contracting Officer for those individuals who have proof of --
 - (i) Current or recent national security clearances (within last three years);
 - (ii) Screening conducted by NASA within last three years; or

(iii) Screening conducted by the Contractor, within last three years, that is equivalent to the NASA personnel screening procedures as approved by the Contracting Officer under paragraph (d) (4) of this clause.

- (e) The Contractor shall ensure that its employees, in performance of the contract, receive annual IT security training in NASA IT Security policies, procedures, computer ethics, and best practices in accordance with NPR 2810.1, Section 4.3 requirements. The contractor may use web-based training available from NASA to meet this requirement.
- (f) The Contractor shall afford NASA, including the Office of Inspector General, access to the Contractor's and subcontractors' facilities, installations, operations, documentation, databases and personnel used in performance of the contract. Access shall be provided to the extent required to carry out a program of IT inspection, investigation and audit to safeguard against threats and hazards to the integrity, availability and confidentiality of NASA data or to the function of computer systems operated on behalf of NASA, and to preserve evidence of computer crime.
- (g) The Contractor shall incorporate the substance of this clause in all subcontracts that meet the conditions in paragraph (a) of this clause.

7. Availability of Funds

Funds are not presently available for this agreement. The Government's obligation under this agreement is contingent upon the availability of appropriated funds from which payment for award purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Grants Officer for this agreement and until the Recipient receives notice of such availability, to be confirmed in writing by the Grants Officer.

EDUCATION COOPERATIVE AGREEMENTS

Standard Provisions

The following provisions are incorporated by reference:

REFERENCE	TITLE	DATE
§ 1260.21	Compliance with OMB Circular A-110	October 2000
§ 1260.22	Technical Publications and Reports	December 2003
§ 1260.23	Extensions	October 2000
§ 1260.24	Termination and Enforcement	October 2000
§ 1260.25	Change in Principal Investigator or Scope	October 2000
§ 1260.26	Financial Management	August 2003
§ 1260.27	Equipment and Other Property	February 2004
§ 1260.28	Patent Rights	October 2000
§ 1260.29	Reserved	
§ 1260.30	In full text	
§ 1260.31	National Security	October 2000
§ 1260.32	Nondiscrimination	April 2004
§ 1260.33	Subcontracts	October 2000
§ 1260.34	Clean Air and Water	October 2000
§ 1260.35	Investigative Requirements	January 2004
§ 1260.36	Travel and Transportation	October 2000
§ 1260.37	Safety	October 2000
§ 1260.38	Drug-Free Workplace	October 2000
§ 1260.39	Buy American Encouragement	May 2003
§ 1260.40	Investigation of Research Misconduct	May 2005

Provisions listed above are contained in the Code of Federal Regulation (14 CFR Part 1260). The CFR can be accessed electronically at: http://www.gpoaccess.gov/cfr/index.html or copies are available in most libraries and for purchase from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Provisions incorporated by reference have the same force and effect as if they were given in full text. The full text provision can be found via the NASA Grant and Cooperative Agreement Handbook web site: http://ec.msfc.nasa.gov/hq/grcover.htm. OMB Circulars referenced in the provisions can be assessed electronically at: http://www.whitehouse.gov/WH/EOP/OMB/html/circular.html or may be obtained from the Office of Administration, Publications Unit, New Executive Office Building, Washington, D.C. 20503. An index of existing OMB Circulars is contained in 5 CFR 1310.

Education Grant/Cooperative Agreement No.:

Principal Investigator:

REQUIRED PUBLICATIONS AND REPORTS IN ACCORDANCE WITH 14 CFR PARTS 1260 AND NPG 5800.1D NASA GRANT AND COOPERATIVE AGREEMENT **HANDBOOK**

The Recipient shall submit the publications and reports indicated below:

	INTERIM REPORTS	REPORT DUE/FREQUENCY	RECIPIENT
X	Quarterly Federal Cash Transactions Reports (SF 272) (Required for all Grants and Cooperative Agreements)	Within 15 working days following the end of each quarter of the Federal fiscal year. (<i>Ref. 1260.26</i>)	FMO, AGO
X	Annual Inventory Report of Federally-Owned Property in Custody of the Recipient (Required for all Grants and Cooperative Agreements, except Training Grants and grants and agreements with commercial organizations.)	No later than October 31 of each year. NOTE: Negative reports are <u>not</u> required. (<i>Ref. 1260.27</i>)	FMO, IPO, AGO
X	Monthly and/or Semi-Annual Progress Reports (see paragraph 1 of the agreement)	No later than the 10 th day following the end of the month or semi-annual period	TO, GO
X	Annual Progress Report/Progress Review (Required for all Grants and Cooperative Agreements, except Training Grants see paragraph 4 of the agreement.) (Not required if period is less than one year.)	Annually, 60 days prior to the anniversary date of each year the grant/cooperative agreement (except final year). (<i>Ref. 1260.21 and 1260.151(d)</i>)	TO, GO, AGO
X	Annual Performance Plan/Performance Metrics (see paragraphs 2 and 3 of the agreement)	Annually, however the report for the first year will be due 60 days prior to the end of the first year. The NASA PM will approve within 30 day's of receipt of annual report.	TO, GO
X	Report of Joint NASA/Recipient Inventions (Required for all Grants and Cooperative Agreements)	As required. (Ref. 1260.28)	PO, TO, GO
X	Disclosure of Subject Inventions (Required for all Grants and Cooperative Agreements)	Within 2 months after inventor discloses it to recipient. (<i>Ref. 1260.28</i>)	PO, TO, GO
X	Election of Title to a Subject Invention (Required for all Grants and Cooperative Agreements)	Within 1 year after disclosure of the subject invention if a statutory bar exists, otherwise within 2 years. (<i>Ref.</i> 1260.28)	PO, TO, GO
X	Listing of Subject Inventions (Required for all Grants and Cooperative Agreements)	Every 12 mos from the date of the grant/cooperative agreement (Ref. 1260.28). NOTE: Negative reports are required.	PO, TO, GO
X	Notification of Decision to Forego Patent Protection (Required for all Grants and Cooperative Agreements)	30 days before expiration of the response period. (<i>Ref. 1260.28</i>)	PO, TO, GO
X	Utilization of Subject Invention (Required for all Grants and Cooperative Agreements)	Annually. (Ref. 1260.28)	PO, TO, GO
X	Notice of Proposed Transfer of Technology (Required for all Grants and Cooperative Agreements) Annual NASA Form 1018 Property in the Custody of Contractors (Required for all Grants and Cooperative Agreements with commercial organizations)	Prior to transferring technology to foreign firm or institution. (<i>Ref. 1260.29</i>) Due 15 October of each year. NOTE: Negative reports are required. (<i>Ref. 1260.67</i>)	PO, TO, GO FMO, IPO, AGO
	FINAL REPORTS	REPORT DUE	RECIPIENT
X	Subject Inventions Final Report (Required for all Grants and Cooperative Agreements)	Within 90 days after the expiration date of the grant/cooperative agreement. (<i>Ref. 1260.28</i>)	PO, AGO, GO
X	Properly Certified Final Federal Cash Transaction Report , SF 272 (Required for all Grants and Cooperative Agreements)	Within 90 days after the expiration date of the grant/cooperative agreement. (<i>Ref. 1260.26</i>)	FMO, AGO, GO

X	Final Inventory Report of Federally-Owned Property (Required for all Grants and Cooperative Agreements, except Training Grants and grants and cooperative agreements with commercial organizations)	Within 60 days after the expiration date of the grant/cooperative agreement. NOTE: Negative reports <u>are</u> required. (Ref. 1260.27)	FMO, IPO, AGO, GO
X	Final Project Review Report (Education Grants only)	Within 90 days after the expiration date of the grant/cooperative agreement. (<i>Ref. 1260.21</i>)	TO, UAO, GO

AESP NNL07ZB1001C

Grants Officer ATTN Grants Office, Mail Stop 126

NASA Langley Research Center

9A Langley Blvd., Bldg. 1195A

Hampton, VA 23681-2199 (757) 864-3100, FAX -7709

Admin. Grants Officer

Regional Office Location: TBD

Office of Naval Research (ONR)

Email: ONR

LaRC Technical Officer ATTN **Dr. Bill Williams** Mail Stop 400

> NASA Langley Research Center Hampton, VA 23681-2199 (757) 864-9728, FAX -864-8835 Email: W.B.Williams@nasa.gov

Industrial Property Officer ATTN Industrial Property Officer, Mail Stop 377

> NASA Langley Research Center Hampton, VA 23681-2199 (757) 864-2064, FAX -8196

Patent Counsel Office ATTN Patent Counsel Office, Mail Stop 141

> NASA Langley Research Center Hampton, VA 23681-2199 (757) 864-9260, FAX -9190

Financial Management Office (For SF 272s) ATTN Financial Management Office, Mail Stop 147

> NASA Langley Research Center Hampton, VA 23681-2199 (757) 864-2130, FAX -2126

Email: Patricia.J.Murray@nasa.gov

Final Inventory Reports of Federally-Owned

Property)

Financial Management Office (For Annual and ATTN Financial Management Office, Mail Stop 147

NASA Langley Research Center Hampton, VA 23681-2199 (757) 864-2096, FAX -2126

Email: Ramona.C.White@nasa.gov

NASA Center for AeroSpace Information

7121 Standard Drive (CASI)

ATTN Carol Dancy, Document Processing Section

Hanover, MD 21076-1320

(410) 712-0272 [or] (301) 621-0100 Email: cdancy@sti.nasa.gov

University Affairs Officer ATTN University Affairs Officer, Mail Stop 400

Office of Education

NASA Langley Research Center Hampton, VA 23681-2199 (757) 864-3312, FAX -8835

GO = LaRC Grants Officer, AGO = ONR Admin. Grants Officer, TO = LaRC Technical Officer, IPO = LaRC Industrial Property Officer, PO = LaRC Patents Office, FMO = Financial Management Office, CASI = NASA Center for AeroSpace Information,

UAO = University Affairs Officer

APPENDIX C NASA Grants Certifications Assurances See next page

NASA Grants Certifications and Assurances

INDEX

ASSURANCE OF COMPLIANCE WITH THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION REGULATIONS PURSUANT TO NONDISCRIMINATION IN FEDERALLY ASSISTED PROGRAMS

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS--PRIMARY COVERED TRANSACTIONS

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160 - 19211).

APPENDIX A TO PART 1271 - CERTIFICATION REGARDING LOBBYING

This certification is required under 34 CFR Part 82," New Restrictions on Lobbying.

Applicants should refer to the regulations cited above to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing these forms. Signature of these forms provides for compliance with certification requirements under 34 CFR Part 82, "New Restrictions on Lobbying", and 34 CFR Part 85, Government-wide Debarment and Suspension (Nonprocurement). The certifications shall be treated as a material representation of fact upon which reliance will be placed when the NASA determines to award the covered transaction, grant, or cooperative agreement.



Assurance of Compliance with the National Aeronautics and Space Administration Regulations Pursuant to Nondiscrimination in Federally Assisted Programs

The	,
(Institution, corporation, firm, or other organization on whose	e behalf this assurance is signed, hereinafter called "Applicant")
Title IX of the Education Amendments of 19 Rehabilitation Act of 1973, as amended (29 U.S.C. U.S.C. 16101 et seq), and all requirements impose Aeronautics and Space Administration (14 CF pursuant to these laws, to the end that in accordar United States shall, on the basis of race, color, na excluded from participation in, be denied the ben under any program or activity for which the A	tile VI of the Civil Rights Act of 1964 (P.L. 88-352), 62 (20 U.S.C. 1680 et seq.), Section 504 of the C. 794), and the Age Discrimination Act of 1975 (42 ed by or pursuant to the Regulation of the National FR Part 1250) (hereinafter call "NASA") issued nee with these laws and regulations, no person in the tional origin, sex, handicapped condition, or age be efits of, or be otherwise subjected to discrimination pplicant receives federal financial assistance from T it will immediately take any measure necessary to
C	
to the Applicant by NASA, this assurance shall obligate the any transferee, for the period during which the real proper financial assistance is extended or for another purpose inversional property is so provided, this assurance shall obligate the	volving the provision of similar services or benefits. If any gate the Applicant for the period during which it retains is, this assurance shall obligate the Applicant for the period
NASA, including installment payments after such date on which were approved before such date. The Applicant recivil be extended in reliance on the representations and ag States shall have the right to seek judicial enforcement of	sistance extended after the date hereof to the Applicant by account of applications for federal financial assistance cognized and agrees that such federal financial assistance
Dated:	
	(Applicant)
	(President, Chairman of Board, or comparable authorized official)
(Applicant's mailing address)	

Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Proposal Identification:	
Organization Namo:	
Organization Name:	
Name and Title of Authorized Representative:	
Signature:	Date:

Certification Regarding Lobbying for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Proposal Identification:	
Organization Name:	
Name and Title of Authorized Representative:	
Signature:	Date:

APPENDIX D Certification of Organization Regarding Eligibility Completion of this form is required.

I. Program Manager/Director Eligibility Certification

1.	Program Manager/Director Name (please print):	
2.	Verification of Employment:	
Em	ployed by (Organization):	
Scl	hool/Department (if applicable):	
Ph	one number for confirmation of above information:	
3.	Authorizing Official Name (please print):	
Au	thorizing Official Title (please print):	
— Au	thorizing Official Signature	Date

APPENDIX E

Federal Demonstration Partnership Terms and Conditions (This document is only applicable to FDP Universities) it is included only for reference and applies only to those universities participating in the FDP program.)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION FEDERAL DEMONSTRATION PARTNERSHIP (FDP) IV AGENCY SPECIFIC REQUIREMENTS (January 2005)

Grants and Cooperative Agreements Updates: http://ec.msfc.nasa.gov/hq/library/grants.html

NASA Grant and Cooperative Agreement Handbook: http://ec.msfc.nasa.gov/hq/grcover.htm

OMB Circulars: http://www.whitehouse.gov/omb/circulars/index.html

Article 1. Awards covered by FDP Terms and Conditions.

Research, education, and training grants to FDP members are covered by FDP terms and conditions. FDP terms and conditions do not apply to cooperative agreements, contracts, or other transactions with FDP members.

Article 2. Prior approval requirements not included in the general terms and conditions.

None.

Article 3. Unallowable direct costs aside from those in A-21/A-122.

None.

Article 4. Contact information for technical matters.

Questions regarding technical matters should be referred to the Technical Officer cited on the cover page of the grant.

Article 5. Contact information for administrative matters.

Questions regarding administrative matters should be referred to the Grant Administrator cited on the cover page of the grant.

Article 6. Contact information for intellectual property matters.

The address of the cognizant patent counsel office is set forth on the distribution list page of the Required Publications and Reports form, which is attached to the grant.

Article 7. Revised budget requirements.

Revised budgets should be submitted in the same format as the original budget submission. Questions on budget format and content should be directed to the Grant Administrator.

Article 8. Technical Publications and Reports.

Technical reporting requirements are addressed in NASA's addendum to FDP General Terms and Conditions Section 51 "Monitoring and reporting program performance," set forth below.

Reference 14 CFR § 1260.22 Technical publications and reports (December 2003)

- (a) NASA encourages the widest practicable dissemination of research results at any time during the course of the investigation.
- (1) All information disseminated as a result of the grant shall contain a statement which acknowledges NASA's support and identifies the grant by number (e.g., "The material is based upon work supported by NASA under award No(s) GRNASM99G000001, etc.").
- (2) Except for articles or papers published in scientific, technical, or professional journals, the exposition of results from NASA supported research should also include the following disclaimer: "Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Aeronautics and Space Administration."
- (3) As a courtesy, any release of a NASA photograph or illustration should list NASA first on the credit line followed by the name of the Principal Investigator's Institution. An example follows:

"Photograph <or illustration, figure, etc> courtesy of NASA <or NASA Center managing the mission or program> and the <Principal Investigator's institution>."

- (b) Reports shall be in the English language, informal in nature, and ordinarily not exceed three pages (not counting bibliographies, abstracts, and lists of other media). The recipient shall submit the following reports:
- (1) A Progress Report for all but the final year of the grant. Each report is due 60 days before the anniversary date of the grant and shall briefly describe what was accomplished during the reporting period as outlined in § 1260.151(d). A special condition specifying more frequent reporting may be required.
- (2) A Summary of Research (or Educational Activity Report in the case of Education Grants) is due within 90 days after the expiration date of the grant, regardless of whether or not support is continued under another grant. This report shall be a comprehensive summary of significant accomplishments during the duration of the grant.
- (c) Progress Reports, Summaries of Research, and Educational Activity Reports shall include the following on the first page:
 - (1) Title of the grant.
 - (2) Type of report.
 - (3) Name of the principal investigator.
 - (4) Period covered by the report.
 - (5) Name and address of the recipient's institution.
 - (6) Grant number.
- (d) Progress Reports, Summaries of Research, and Educational Activity Reports shall be distributed as follows:
 - (1) The original report, in both hard copy and electronic format, to the Technical Officer.
- (2) One copy to the NASA Grant Officer, with a notice to the Administrative Grant Officer (when administration of the grant has been delegated to ONR), that a report was sent.
- (e) For Summaries of Research and published reports, one micro-reproducible copy shall also be sent to the NASA Center for AeroSpace Information (CASI), Attn: Document Processing Section, 7121 Standard Drive, Hanover, MD 21076.

Article 9. Financial reporting.

Financial reporting requirements are addressed in NASA's addendum to FDP General Terms and Conditions Section 52 "Financial reporting," set forth below.

Reference 14 CFR § 1260.26 Financial management (August 2003)

(a) Advance payments through a Letter of Credit will be made by the Financial Management Office of the NASA Center assigned financial cognizance of the grant, using the Department of Health and Human Services' Payment Management System (DHHS/PMS), in accordance with procedures provided to the recipient. The recipient shall a submit Federal Cash Transaction Report (SF 272) and, when applicable, a Continuation Sheet (SF 272A) electronically to DHHS/PMS within 15 working days following the end of each Federal Fiscal quarter

- (i.e., December 31, March 31, June 30, and September 30). One Federal Cash Transactions Report shall be submitted for all grants financed under a letter of credit arrangement with each NASA Center.
- (b) In addition, the Recipient shall submit a final SF 272 in paper form to NASA within 90 calendar days after the expiration date of the grant. The final SF 272 shall pertain only to the completed grant and shall include total disbursements from inception through completion. The report shall be marked "Final". The final SF 272 shall be submitted to the Financial Management Office, with a copy sent to the NASA Grant Officer.
- (c) Unless otherwise directed by the Grant Officer, any unexpended balance of funds which remains at the end of any funding period, except the final funding period of the grant, shall be carried over to the next funding period, and may be used to defray costs of any funding period of the grant. This includes allowing the carry over of funds to the second and subsequent years of a multiple year grant. This provision also applies to subcontractors performing substantive work under the grant. For grant renewals, the estimated amount of unexpended funds shall be identified in the grant budget section of the Recipient's renewal proposal. NASA reserves the right to remove unexpended balances from grants when insufficient efforts have been made by the grantee to liquidate funding balances in a timely fashion.

Article 10. Incremental funding actions.

No additional documentation is required to trigger an increment; however, non-compliance with reporting requirements or unacceptable expenditure rates reported on NASA Form 272 Cash Transaction Report may delay incremental funding, but not without prior discussion with recipient.

NASA ADDENDA TO FDP GENERAL TERMS AND CONDITIONS

FDP ARTICLES

- 11. Payments.
- 12. Revision of program and budget plans.
- 13. Equipment.
- 14. Intangible property.
- 15. Security Requirements.
- 16. Safetv.
- 17. Buy American Encouragement.

Article 11. Payments.

Refer to Article 9 Financial reporting.

Article 12. Revision of program and budget plans.

Paragraph 25(e)(4) of the Article is revised as follows: If uncommitted carry-over funds are likely to be substantial, the estimated amount shall be included in any continuation proposal.

Paragraph 25(m) of the Article is revised as follows: Any extension that would require additional funding must be supported by a proposal submitted at least three months in advance of the expiration date of the grant.

Article 13. Equipment.

Reference 14 CFR § 1260.27 Equipment and other property (February 2004)

- (a) On an exceptional basis, NASA permits acquisition of special purpose and general purpose equipment specifically required for use exclusively for research activities.
- (b) The recipient shall submit an annual Inventory Report, to be received no later than October 15 of each year, which lists all reportable (non-exempt equipment and/or Federally owned property) in its custody as of September 30. Negative responses for annual Inventory Reports (when there is no reportable equipment) are not required. A Final Inventory Report of Federally Owned Property, including equipment where title was taken

by the Government, will be submitted by the recipient no later than 60 days after the expiration date of the grant. Negative responses for Final Inventory Reports are required.

- (1) All reports will include the information listed in paragraph (f)(1) of § 1260.134, Equipment. No specific report form or format is required, provided that all necessary information set forth at § 1260.134(f)(1) is provided.
- (2) The original of each report shall be submitted to the Center Deputy Chief Financial Officer, Finance (DCFO(F)). Copies shall be furnished to the Center Industrial Property Officer and to ONR.

Article 14. Intangible property.

Reference 14 CFR § 1260.28 Patent rights (October 2000)

As stated at § 1260.136, this award is subject to the provisions of 37 CFR 401.3(a) which requires use of the standard clause set out at 37 CFR 401.14 "Patent Rights (Small Business Firms and Nonprofit Organizations)" and the following:

- (a) Where the term "contract" or "contractor" is used in the "Patent Rights" clause, the term shall be replaced by the term "grant" or "recipient," respectively.
- (b) In each instance where the term "Federal Agency," "agency," or "funding Federal agency" is used in the "Patent Rights" clause, the term shall be replaced by the term "NASA."
 - (c) The following item is added to the end of paragraph (f) of the "Patent Rights" clause:
- "(5) The recipient shall include a list of any Subject Inventions required to be disclosed during the preceding year in the performance report, technical report, or renewal proposal. A complete list (or a negative statement) for the entire award period shall be included in the summary of research."
 - (d) The term "subcontract" in paragraph (g) of the "Patent Rights" clause shall include purchase orders.
- (e) The NASA implementing regulation for paragraph (g)(2) of the "Patent Rights" clause is at 48 CFR 1827.304-4(a)(i)(B).
 - (f) The following requirement constitutes paragraph (I) of the "Patent Rights" clause:
- "(I) **Communications.** A copy of all submissions or requests required by this clause, plus a copy of any reports, manuscripts, publications or similar material bearing on patent matters, shall be sent to the Center Patent Counsel and the NASA Grant Officer in addition to any other submission requirements in the grant provisions. If any reports contain information describing a "subject invention" for which the recipient has elected or may elect to retain title, NASA will use reasonable efforts to delay public release by NASA or publication by NASA in a NASA technical series until an application filing date has been established, provided that the recipient identify the information and the "subject invention" to which it relates at the time of submittal. If required by the NASA Grant Officer, the recipient shall provide the filing date, serial number and title, a copy of the patent application, and a patent number and issue date for any "subject invention" in any country in which the recipient has applied for patents."
- (g) **NASA Inventions.** NASA will use reasonable efforts to report inventions made by NASA employees as a consequence of, or which bear a direct relation to, the performance of specified NASA activities under this agreement and, upon timely request, will use reasonable efforts to grant the recipient an exclusive, or partially exclusive, revocable, royalty-bearing license, subject to the retention of a royalty-free right of the Government to practice or have practiced the invention by or on behalf of the Government.

OTHER AGENCY REQUIREMENTS

Article 15. Security requirements.

Reference 14 CFR § 1260.35 Investigative requirements (January 2004)

- (a) NASA reserves the right to perform security checks and to deny or restrict access to a NASA Center, Facility, or computer system, or to NASA technical information, as NASA deems appropriate. To the extent the recipient needs such access for performance of the work, the recipient shall ensure that individuals needing such access provide the personal background and biographical information requested by NASA. Individuals failing to provide the requested information may be denied such access.
- (b) All requests to visit a NASA Center or facility must be submitted in a timely manner in accordance with instructions provided by that Center or facility.

Article 16. Safety.

Reference 14 CFR § 1260.37 Safety (October 2000)

- (a) The recipient shall act responsibly in matters of safety and shall take all reasonable safety measures in performing under this grant. The recipient shall comply with all applicable federal, state, and local laws relating to safety. The recipient shall maintain a record of, and will notify the NASA Grant Officer of any accident involving death, disabling injury or substantial loss of property. The recipient will advise NASA of hazards that come to its attention as a result of the work performed through routine status reports furnished in compliance with this grant.
- (b) Where the work under this grant involves flight hardware, the hazardous aspects, if any, of such hardware will be identified, in writing, by the recipient. Compliance with this provision by subcontractors shall be the responsibility of the recipient.

Article 17. Buy American Encouragement.

Reference 14 CFR § 1260.39 Buy American encouragement (May 2003)

As stated in Section 319 of Public Law 106-391, the NASA Authorization Act of 2000, Recipients are encouraged to purchase only American-made equipment and products.

Appendix F

The following information is available as <u>historical data</u> to assist potential offerors in the preparation of their proposals. This information is available at the addresses following the description of data. This information should in no way inhibit the offeror in their response. NASA is looking for new, effective, cost efficient ways to accomplish the AESP vision.

- 1. Current Statement of Work from Cooperative Agreement: NCC5-561
- 2. List of Government Property.
- 3. Staffing Profile
- 4. Copies of the last 2 reports under the current cooperative Agreement
- 5. Fiscal Year data from October 2005 September 2006

The web site where this data resides is:

http://dml.larc.nasa.gov/aesp/

As the offeror will be provided access to the NASA Digital Learning Network, additional information regarding the DLN is located at:

http://nasadln.nmsu.edu/dln/content/about/

Additional information regarding the AESP program may be found at:

http://www.okstate.edu/aesp/AESP.html